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### REMARKS

Applicant thanks the Examiner for recognizing patentable subject matter in claims 32-34.

Claims 1-31 and 35-42 were rejected under 35 U.S.C. § 103 (a) as being unpatentable over Mueller, U.S. Patent No. 4,480,124. This rejection is respectfully traversed.

The Examiner asserts that because Mueller discloses a process for producing low color polytetramethylene ether glycol, it would not be unreasonable for one having ordinary skill in the art to expect that PO3G would behave similarly in the process of Mueller. Applicant respectfully disagrees. Applicant points out that, as disclosed in the specification of the present application at page 4, line 20 through page 5, line 4, previous attempts to reduce color in polytrimethylene ether glycols, using methods that included the use of activated carbons, activated aluminas, silica gels, percolation alone, and hydrogenation, were not deemed successful. For example, Morris et al., US Patent 2,520,733, disclose a process that involves percolation of the polymer through Fuller's earth followed by hydrogenation. The process gave a final product that was light yellow in color, having an 8 Gardner color, a quality corresponding to an APHA value of >300. Thus, Applicant submits that a person of ordinary skill in the art, at the time the invention was made, would not be led to Applicant's process, because the prior art taught that purification by hydrogenation would not reduce the color in polytrimethylene ether glycols to an amount of color acceptable for many applications. Also, it is expected that the color species present in different polymers made by different polymerization processes are different, and not all colored species present in the polymer can necessarily be removed by hydrogenation process.

Applicant further submits that one of ordinary skill would not expect polytrimethylene ether glycols to respond to a particular process in the same manner as polytetramethylene ether glycol because they are structurally different molecules, made from entirely different raw materials and different polymerization processes. For example, the disclosed polytetramethylene ether glycol is made from a ring opening polymerization of a cyclic ether (tetrahydrofuran) at temperatures well below 100 °C, whereas the polytrimethylene ether glycol of the present application is made from polycondensation of a linear 1,3-propanediol at temperatures well above 150 °C. The color-causing chemical species are thus not expected to be the same as those present in polytetramethylene ether glycol and therefore it is not obvious that the hydrogenation treatment that works for polytetramethylene ether glycols would work for polytrimethylene ether glycol. Applicant submits that it is well known to those

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skilled in the art that the presence of a single methylene unit can have a significant effect on the properties and reactivities of homologs.

Applicant has developed a process that can provide PO3G having an APHA color of less than about 50 and a molecular weight of about 250-5,000. Applicant submits that there is no suggestion of such a process for PO3G in Mueller.

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**CONCLUSION**

Applicant submits that all of claims 1-42 are allowable over the cited art. Accordingly, withdrawal of the rejection of claims 1-31 and 35-42 and allowance of all claims is respectfully requested.

Should there be any remaining issues regarding the present application, the Examiner is respectfully requested to telephone Applicant's undersigned representative to resolve such issues.

Respectfully submitted,

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